Alarm Reduction in Critical Care

The Problem
The American Association of Critical Care Nurses (AACN) sounded the alarm with the following practice alert in April 2013 to raise the level of awareness and action surrounding alarm fatigue:

- ‘Alarm fatigue has been associated with approximately 200 deaths in the US since 2005.’
- For many years, bedside clinicians have reported “alarm fatigue”, which desensitizes the staff to alarms. In a survey conducted with BIDMC staff, 84% of respondents believed alarm fatigue was a problem on their unit.

In addition, the Joint Commission established a 2014/16 National Patient Safety Goal of improving the safety of clinical alarm systems which not only heightens awareness but also introduces requirements to help mitigate potential patient safety risks.

BIDMC Critical Care and Stepdown (SD) units identified opportunities for improvement with addressing alarm fatigue and effectively addressing regulatory requirements related to clinical alarms safety.

Aim/Goal
- To improve patient safety and reduce the number of bedside alarms by 19% on the critical care and SD units at BIDMC by focusing on non-actionable alarms.
- To ensure that critical care and SD units address all required elements of performance, and effectively address the Joint Commission’s National Patient Safety Goal 6.01.01, to Improve the Safety of Clinical Alarm Systems.

The Interventions (continued)
- Created and conducted ICU/SD Monitoring Alarms Survey with staff to measure staff’s concerns of alarm fatigue and knowledge related to alarms monitoring, documentation, electrode changes, etc. (Q1 FY14)
- Evaluated opportunities for reduction of yellow, non-actionable alarms and implemented changes across ICU and SD units consistent with AACN recommendations and published reports from other hospitals.

The Results/Progress to Date

![Critical Care Alarm Reduction Graph]

*No reports of near-miss or sentinel events

Lessons Learned
- Many yellow cardiac alarms can safely be defaulted to OFF in the ICUs.
- Turning off non-actionable alarms can significantly reduce “background noise” and associated alarm fatigue.

Next Steps
- Explore LOW SAT opportunities
- Education: lead placement, alarm review and alarm response
- Monitor standardization

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